

## CLAIMS

1. Communication system between a portable unit, such as a watch, and a communication terminal such as a personal computer or PC, characterised in that the communication terminal (2) includes at least means for transmitting an acoustic signal carrying data, and in that the portable unit (1) includes at least processing means for  
5 processing data, and receiving and conversion means for picking up said acoustic signal and converting said acoustic signal into data intended to be processed by said processing means.

2. Communication system according to claim 1, characterised in that the portable unit (1) further includes conversion and transmission means for converting  
10 data supplied by said processing means of said portable unit (1) into an acoustic signal carrying data and for transmitting an acoustic signal, and in that the communication terminal (2) further includes processing means for processing data and reception and conversion means for receiving said acoustic signal transmitted by the  
15 portable unit (1) and for converting said acoustic signal into data intended to be processed by said processing means of said communication terminal (2).

3. Communication system according to any of the preceding claims, characterised in that the reception and conversion means of the portable unit (1) include an electro-acoustic transducer 2b.

4. Communication system according to claims 2 or 3, characterised in that  
20 the conversion and transmission means of the portable unit (1) include an electro-acoustic transducer (26).

5. Communication system according to any of claims 2 to 4, characterised in that the conversion and transmission means of the portable unit (1) and the  
25 reception and conversion means of the portable unit (1) implement the same electro-acoustic transducer (30).

6. Communication system according to any of claims 3 to 5, characterised in that the reception means of the portable unit (1) include an amplifier (10) for the electric signal generated by the electro-acoustic transducer (8) and a demodulator (12) connected to the signal amplifier (10) and intended to demodulate the acoustic signal  
30 received by the transducer (8) and to transmit the demodulated signal to an input of a microcontroller (14) which constitutes the processing means of said portable unit (1), the data carried by the acoustic signal transmitted by the communication terminal (2) demodulated by the demodulator (12) and processed by the microcontroller (14) being stored in a memory (16) associated with said microcontroller (14).

7. Communication system according to any of claims 4 to 6, characterised in that the conversion means of the portable unit (1) include a modulation circuit (22) which, via a drive circuit (24), drives the electro-acoustic transducer (26), the processing means of the portable unit (1) which include a microcontroller (14)  
5 controlling the modulation circuit (22) using data originating from a memory (16) associated with said microcontroller (14).

8. Communication system according to any of the preceding claims, characterised in that the reception and conversion means of the portable unit (1) include a sound generator circuit provided with a piezoelectric vibrator (P) forming  
10 receiving means for the acoustic signal.

9. Communication system according to claim 8, characterised in that the reception and conversion means of the portable unit (1) further include comparison means (COMP) for comparing the voltage generated by the piezoelectric vibrator (P) when the acoustic signal is received with a reference voltage (+E), these comparison means (COMP) generating an electric signal representative of the data carried by said acoustic signal.